



Dam Safety Inspection Form

State of Oregon
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900

Name of Dam: Malheur (Willow 3) File #: W-6

Height: 110 ft. Storage: 20,000 ac. ft. Permit: _____ NID #: OR- 00212

Hazard: Low Significant High Inspector(s): Mills, Jacobs District: 9

Others on site: McBride

Date: 5-3-17 Temperature: 80°F Dry Rain Snow Now Recently

Prior Inspection Date: 6-14-16 Issues from prior inspection: operation of large valve (cyclic)

Rating Criteria: 5-Exemplary; 4-Adequate 3-Maintenance or minor repair needed

2-Serious repair needed; 1- Urgent dam safety issue – action now - Contact owner and dam safety directly

General	Rating
Structures below dam	<input type="checkbox"/> New <input checked="" type="checkbox"/> Existing <input type="checkbox"/> Request Dam Safety review of hazard rating
Distance to dam	Dwelling _____ feet Paved public road _____ feet Other building _____ feet <u>near</u>
Vehicle access	<input type="checkbox"/> All weather road <input checked="" type="checkbox"/> Dirt road <input type="checkbox"/> Cross country <u>4</u>
Detail:	

Reservoir	Pool level: <u>384.92</u>	Point of Reference: <input type="checkbox"/> Crest <input checked="" type="checkbox"/> Gage _____	Rating
Minimum freeboard	Vertical distance from debris line to lowest place on crest <u>30</u> ft.		<u>4</u>
Debris	<input type="checkbox"/> Floating Debris/Trash <input type="checkbox"/> Log Boom <input type="checkbox"/> Unusual Conditions		<u>4</u>
Detail:			

Spillway	Rating
Modifications	<input type="checkbox"/> None <input type="checkbox"/> Reduction in capacity <input type="checkbox"/> Feature not on design
Approach Channel	<input type="checkbox"/> Clear <input type="checkbox"/> Trees/brush <input type="checkbox"/> Debris <input type="checkbox"/> Erosion
Control Section	<input type="checkbox"/> Concrete <input type="checkbox"/> Rock <input type="checkbox"/> Soil <input type="checkbox"/> Culvert <input type="checkbox"/> Unstable Width _____ Depth _____
Flashboards/Gate	<input type="checkbox"/> None <input type="checkbox"/> In place <input type="checkbox"/> Operational <input type="checkbox"/> Deteriorated
Discharge Channel	<input type="checkbox"/> Clear <input type="checkbox"/> Trees/brush <input type="checkbox"/> Leakage <input type="checkbox"/> Headcutting (_____ feet from spillway control section, depth _____ feet.)
Stilling basin	<input type="checkbox"/> N/A <input type="checkbox"/> Functional <input type="checkbox"/> Minor Erosion <input type="checkbox"/> Severe Erosion/Undercutting
Aux. Spillway	<input type="checkbox"/> Yes <input type="checkbox"/> No (use comments below)
Detail:	<u>Wet Can not reach, not inspected</u>

Seepage/Leakage	Rating
Serious conditions	<input type="checkbox"/> Leakage <input type="checkbox"/> Piping <input type="checkbox"/> Discolored water <input type="checkbox"/> Boils
Locations*	<input type="checkbox"/> No evidence <input type="checkbox"/> Center <input type="checkbox"/> Left <input checked="" type="checkbox"/> Right <input type="checkbox"/> Around pipe <input type="checkbox"/> On dam _____
Flow	<input type="checkbox"/> Wet vegetation <input type="checkbox"/> Spongy <input type="checkbox"/> Standing water <input type="checkbox"/> Flow <u>25</u> gpm
Toe drains	<input checked="" type="checkbox"/> None <input type="checkbox"/> Working <input type="checkbox"/> Damaged <input type="checkbox"/> Buried
Detail:	<u>Right abutmt only ~ Clear, at outlet</u>

Conduit	Control: <input type="checkbox"/> Manual <input type="checkbox"/> Power <input type="checkbox"/> Other <input type="checkbox"/> Conduit Control missing	Rating
Inlet	<input checked="" type="checkbox"/> Submerged <input type="checkbox"/> Debris on Trash Rack <input type="checkbox"/> Deterioration	2
Trickle tube	<input checked="" type="checkbox"/> None <input type="checkbox"/> Screened <input type="checkbox"/> Blockage <input type="checkbox"/> Deterioration	2
Control/Stem	<input type="checkbox"/> Operable <input type="checkbox"/> Damaged <input type="checkbox"/> Missing *	3
Valve(s) cycling	<input type="checkbox"/> Frozen <input type="checkbox"/> Unknown <input type="checkbox"/> Past year <input type="checkbox"/> Frequent	4
Pipe 18"	Diameter/Size: _____ Material <u>Concrete</u> Condition _____	4
Primary outlet	<input type="checkbox"/> Overgrown <input checked="" type="checkbox"/> Clean <input type="checkbox"/> Pressurized <input type="checkbox"/> Leaking _____ gpm	4
Other outlet(s)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Type(s) <u>Gate</u> Diameter(s) <u>36</u> in.	4
Detail:	<u>Both operational - Controls - finish work</u> <u>Stop - left building dry</u>	

Structure of dam	<input type="checkbox"/> Earth <input type="checkbox"/> Rock <input type="checkbox"/> Concrete <input type="checkbox"/> Other	Rating
Distress	<input type="checkbox"/> Cracks - offset _____ in <input type="checkbox"/> Landslide(s) <input type="checkbox"/> Sinkhole(s) <input type="checkbox"/> Crest Settlement <input type="checkbox"/> Narrow crest <input type="checkbox"/> Wave erosion <input type="checkbox"/> Trampling <input type="checkbox"/> Surface erosion	4
Locations*	<u>no distress since 4/14/2 construction</u>	
Other	Describe _____	
Aux. dike (s)	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> over 5	
Animals	<input type="checkbox"/> Nutria <input type="checkbox"/> Badger Other <u>Snakes</u> <input type="checkbox"/> Unknown	Rating
Burrows	<input type="checkbox"/> Observed max diameter _____ in max depth _____ ft <input type="checkbox"/> Trails	4
Locations*		
Vegetation		Rating
Cover	<input type="checkbox"/> Low grass <input type="checkbox"/> high grass <input checked="" type="checkbox"/> brush <input type="checkbox"/> blackberries <input type="checkbox"/> small trees <input type="checkbox"/> large trees	4
Locations*		
Impairs inspection	<input type="checkbox"/> toe seepage <input type="checkbox"/> conduit outlet <input type="checkbox"/> spillway <input type="checkbox"/> upstream face <input type="checkbox"/> downstream face <u>No</u>	4
Detail:		

*Locations – Upstream face, Crest, Downstream face, Left and Right abutments, Toe

Expedited Re-inspection Needed: Next Inspection Date: _____

Other Issues or Additional Detail Needed:
